February 28, 1961

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Dear Phil:

I hardly know better than you what to make of your 3 phase types. They may be related to the odd ball CDC-137 which proved to be H_1^b: $H_1^{1\cdot2}$ (sic). When you succeed in getting transductions in these stocks you can at least explore what the homologous replacements are. For example, I would try say:

S. grumpensis d: 1,7 X Z_{43}: lw: Z

If you get d —> lw <—> or more likely 1,7:—>lw<—> Z you can at least be sure that Z_{43} —> lw is not merely a mutation like H_1^b —> H_1^{z33}. Too bad you don't have some similar odd balls in group B.

Bruce Stocker is visiting us again (till June), but we have very little Salmonella going on right now. Instead we are trying to work up Bacillus subtilis along similar lines (flagellar and antigen mutants).

Good luck,

As ever,

Joshua Lederberg
Professor of Genetics

Enc. Nester & Lederberg